AMENDMENTS TO THE CLAIMS

1-3. (Canceled)

4. (Currently Amended) The An optical polymeric compound of claim 1, wherein the polyimide repeating unit has containing polyimide repeating units and organic dye molecular groups, wherein the optical polymeric compound has the following formula:

where S is an organic dye molecular group having a structure of the following formula:

where X_1 is hydrocarbon, oxygen, sulfur, nitrogen, ester (CO₂), or amide (CONR₁), where R₁ is an alkyl or phenyl group having 1 to 6 carbon atoms, D is an organic chromophore molecule selected from the group consisting of an amino-isophorone-dicyanide (AIDC) derivative and an amino-isophorone-isooxozolone (AIOX) derivative, an n is an integer from 1 to 10, and where A and B are each independently fluorocarbon-substituted or unsubstituted hydrocarbons having 1 to 4 carbon atoms, oxygen, nitrogen, or sulfur, and m is in the range of

0.01 to 1 as the ratio of the polyimide repeating units to all the repeating units of the optical polymeric compound.

5. (Currently Amended) The optical polymeric compound of claim 4, wherein the polyimide repeating unit optical polymeric compound has the following formula:

- 6. (Original) The optical polymeric compound of claim 4, wherein the polyimide repeating unit contains 10-60 % by weight the organic chromophore molecule D.
- 7. (Currently Amended) The optical polymeric compound of claim 4, wherein the polyimide repeating unit—is couple with contains at least one organic chromophore molecule selected from the group of organic chromophore molecules having the following formula—(A-1), (A-2) and (A-3) in which each chromophore molecule is shown as D-OH, or with a combination of the organic chromophore molecules in a predetermined ratio:

where R and R' are each independently alkyl or phenyl groups having 1 to 10 carbon atoms, A_1 is carbon or nitrogen, X_2 is NO_2 , a sulfonyl-substituted or unsubstituted alkyl group having 1 to 10 carbon atoms, CN, $-C(CN)=C(CN)_2$, an ester group, a carbonyl group, a halogen element, or a haloalkyl group, and n is an integer from 1 to 11.